FY 2003 FGDC Annual Report to OMB

The following outline should be used by FGDC Member Agencies (or Bureaus) for their Annual Spatial Data Reports, which will be consolidated by the FGDC and submitted to OMB. Reports **should be brief, using bullets where possible**. Please provide only the information that will be useful for OMB to assess the agencies' achievements and for establishing future direction.

GENERAL FEDERAL AGENCY RESPONSIBILITIES REPORT (All Agencies)

1. Agency or Bureau: USDA Natural Resources Conservation Service

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5. Subcommittee or Working Group Participation (Subcommittees or Working Groups your agency is involved with, but does not lead).

Subcommittees

Base Cartographic Data Geologic Spatial Water Data Vegetation Wetlands

Working Groups

Biologic Data Geospatial Applications & Interoperability Homeland Security Standards Sustainable Forest Data Earth Cover (inactive)

- 6. Strategy: Has your agency prepared a detailed strategy for integrating geographic information and spatial data activities into your business process in coordination with the FGDC strategy, pursuant to OMB Circular A-16? If yes, briefly describe.
 - Yes. To support timely access and accurate application of the data, the agency has incorporated spatial data into most program management strategies as well as the NRCS <u>Integrated Information System</u> which encompasses critical software applications and data distribution.
 - Detailed plans addressing data delivery, system architecture, USDA data standards and GPRA goals have been developed. The combined USDA Service Center Agencies (NRCS, RD, FSA), have developed the <u>USDA Service Center Agencies GIS</u> <u>Implementation Strategy, 2001</u>. See http://www.ftw.nrcs.usda.gov/nsdi_node.html
- Compliance: How are your spatial data holdings compliant with FGDC Standards?
 Also, please list the FGDC Standards you are using or plan to use in your organization.

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- NRCS uses or partners in data acquisition efforts which use the following endorsed FGDC standards:
 - Content Standard for Digital Geospatial Metadata (version 2.0) FGDC- STD-001-1998
 - Soil Geographic Data Standard, FGDC-STD-006
 - Content Standard for Digital Orthoimagery, FGDC-STD-008-1999
- NRCS is implementing the <u>Federal Standard for Delineation of Hydrologic Unit</u> <u>Boundaries</u>. This standard is in the proposal phase and has not yet been endorsed by FGDC. NRCS staff coordinates the data certification process.
- USDA/NRCS and the USDA Service Center Agencies have developed standards specific to internal business needs. See http://dlnt20.fsa.usda.gov/scdm/ for USDA data management efforts.
- NRCS will adopt the framework data content standards under development by the GOS project when complete.
- NRCS utilizes other national and international standards where appropriate and USDA is a member of the International Committee for Information Technology Standards.
- 8. Redundancy: Prior to collecting data, how does your agency ensure that the data are not already available?
 - NRCS relies upon local communication, the NSDI clearinghouse, national coordination bodies such as FGDC, federal, state and local partners, informal geospatial data community, state geospatial consortiums and the private data vendor community to identify available data.
- 9. Collection: Do your agency contracts and grants involving data collection include costs for NSDI standards?
 - Yes. However they often do not include the long term support and maintenance of hardware required to serve data.
- 10. Clearinghouse: Is all the data and/or metadata that your agency is able to share with the public published on the NSDI Clearinghouse? If not, please cite barriers encountered.
 - No. NRCS generates several program specific datasets that are available from NRCS websites but not discoverable via the Clearinghouse due to the lack of FGDC compliant metadata and localized nature of many of the datasets.
 - NRCS has the potential to deploy data to roughly 2,600 agency field offices. The majority of staff are natural resources specialists who use GIS software and data to support their conservation planning efforts and are not GIS specialists. The NSDI Clearinghouse requires an investment of time which field staff would prefer to dedicate towards field related conservation activities. As a result the USDA Service Center Agencies have deployed an application which better meets the needs of staff. The application supports on-screen geographic selection of the area of interest, online data ordering and real-time download capability of select datasets. This application is referred to as the Natural Resource Data Gateway, and can be accessed at http://lighthouse.nrcs.usda.gov/gateway/.
 - > The Natural Resource Data Gateway is one of the data access points for agriculture data at the Geodata.gov portal.
- 11. E-Gov: How are you using geospatial data in your mission activities to provide better services? (Please list)

- NRCS has identified major customer products and services which support E-government activities. Most rely upon or have a geospatial component to facilitate information retrieval and data analysis. The activities support the USDA E-government strategy. See www.egov.usda.gov for USDA strategy. Examples of NRCS applications supporting E-government:
 - Customer Service Toolkit (CST) conservation planning software tool.
 - Resource Data Gateway single point of access for geospatial information.
 - Wetland Easements Tool supports update and tracking of wetland easement boundaries for restoration and planning.
 - Land Evaluation and Site Assessment (LESA) supports local resource decision making.
 - Office Information Profile (OIP) allows customers to locate agency offices and staff in their area of interest.
- Geospatial data are a critical component of the NRCS Performance and Results Management System (PRMS http://prms.nrcs.usda.gov/prms/index.html) and the Integrated Accountability System (IAS http://calais.itc.nrcs.usda.gov/IAS2002/). Using these tools, agency leadership is able to refine strategic goals and better align NRCS services to meet customer needs.
- NRCS allows internal and external customers to order digital geospatial data via the Internet from http://lighthouse.nrcs.usda.gov/gateway/ or access data via the NRCS NSDI clearinghouse node which we maintain.
- 12. Geospatial One-Stop: How is your agency involved in the Geospatial One-Stop?
 - NRCS provided \$22,500 in FY03.
 - An NRCS staff person has served as the standards lead for nine months.
 - Additional NRCS staff support the effort with expertise in standards, model development, webpage development and system architecture expertise.
 - > \$45,000 was provided in FY02 in addition to USDA funds for portal development.
- 13. Enterprise Architecture: Is geospatial data a component of your enterprise architecture? Please provide a brief summary of how geospatial data fits into your enterprise architecture.
 - ➤ The USDA Service Center Agencies (SCA) maintain a shared enterprise architecture. Geospatial data are a key component and driver. The SCA's are implementing a mixed decentralized and centralized architecture to accommodate the need of all three agencies.
 - ➤ The data architecture accommodates the need for geospatial data at all levels of the organizations, local, state and national. At the local and state levels data are being provided to all three agencies and their partners from shared servers using FGDC standard data and metadata in a common file and folder structure. SCA are implementing geodata warehouses for web delivery of geospatial data to local, state and national offices and our customers.
 - > NRCS data is discoverable via the NSDI clearinghouse and the Goedata.gov portal.
- 14. Partnerships: What efforts are being taken to coordinate data and build partnerships at the field level for data collection and standards development? Identify partnerships and data sharing activities with other federal agencies, state, local, and tribal governments and other entities.
 - NRCS staff are active members of the state geodata consortiums which are critical in leveraging funds to support data development.

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- Where I-Teams have been formed or are coincident with the state consortiums, NRCS staff participate.
- NRCS state level partnerships with other federal agencies, states, local and tribal governments are too numerous to list. Examples include, staff sharing between NRCS, BLM and Forest Service, multi-partner funding for the completion of soil surveys, university partnerships to support digital data development and DOQ development with USGS. State by state detailed information available upon request.
- The National Cooperative Soil Survey (NCSS) is a national, multi partner effort to support the collection, distribution and interpretation of soils information. Details of the partnership and standards process available at: http://www.geoall.net/docs/lessons_from_practice.pdf.
- 15. Concerns or Lessons Learned: Are there areas or issues regarding spatial data that require attention or lessons learned that you would like to share with others? Please describe.
 - There is a significant need for additional standards expertise within FGDC. Existing staff resources are not adequate to lead the development of national standards, coordinate agency efforts, and participate in international development activities. Existing staff also support GOS where possible and human resources are not adequate to address all these emerging efforts when the federal agencies often lack standards expertise.
 - An overall standards strategy is needed to address existing FGDC standards, how they will relate to the evolving framework standards resulting from GOS, maintenance and retirement of existing FGDC standards should also be addressed. This effort may be currently underway.
 - ➤ There is a lack of understanding on the part of those outside of the standards arena regarding the complexity and extensive time required to move standards thru the national and international community. Consortium based standards can align to short-term deadlines but voluntary consensus standards are much more likely to take years rather than months.
 - There are few incentives for cross-agency cooperation since budget allocations are specifically linked to individual agency performance in support of mandated programs. This tends to impede cooperation since few short-term tangible products are evident from cooperation and it not captured as a performance measure to which funds are attached. There needs to be a greater value associated with cooperation and partnership development.
 - Alternative performance measures for long-term data development strategies are needed. Digital data development for national programs such as the National Cooperative Soil Survey take years to complete. Once complete, the data must be maintained, archived and applications developed to generate useful information.
 - Long term data maintenance, quality standards, distribution and security measures must be accurately addressed by agencies and conveyed clearly to funding bodies in order to ensure long term funding for these hidden costs of data development.
 - ➤ The relationship between private sector and federal data warehouse/portal activities needs to be explored to minimize duplicative, non complimentary activities.
 - Federal theme leads remain unclear on the full extent of their role as defined in Circular A-16 specific to data themes. The full intent of A-16 should be summarized and simplified to clearly state the desired role that theme leads will undertake to coordinate and share data with the public. Funding may be a limitation to implementing the full extent of the circular.